

On March 11, 2003, the Mississippi Public Safety Communications Interoperability Conference was held in Jackson, Mississippi. This conference was sponsored by the Public Safety Wireless Network (PSWN) Program and hosted by the Mississippi Department of Public Safety (DPS), Mississippi Emergency Management Agency (MEMA), and the Mississippi Department of Transportation (MDOT). More than 150 local, state, and federal public safety and government officials came together in Mississippi's capital to increase their awareness of and discuss the critical need for improved communications interoperability within the state.

The agenda of this full-day conference included introductions, presentations, and facilitated discussions, all with opportunities for audience questions. These activities provided a unique forum that permitted participants to better understand the problems associated interoperability. Participants also learned of ongoing activities and key results-oriented actions that will enable the State of Mississippi to address critical short-term interoperability needs and longefforts planning for the implementation of statewide public safety communications system.



Pictured from left to right—Ronnie Musgrove, Governor of Mississippi; William Jenkins, Assistant Special Agent in Charge—FBI Jackson; Robert E. Lee, Jr., PSWN Program Manager—FBI/Department of Justice; David Huggins, Commissioner—Mississippi DPS

The conference began with a welcome address from Mississippi Governor Ronnie Musgrove. Governor Musgrove's address marks a PSWN Program milestone—this was the first conference in the program's history to have participation from a sitting governor. Governor Musgrove extended a welcome from the 2.8 million residents of the state to all the conference participants at the conference. as well as his appreciation to key members of his staff and the PSWN Program for the efforts undertaken to make the conference a reality. He continued with a discussion of the changes to the public safety landscape that were required subsequent to the terrorist events of September 11, 2001. He stated that the state was not immune to the effects of the terrorist events and that Mississippi responded to ensure to the public's safety. He further stated that Mississippi was one of the first states to with a coordinated effort across all levels of government to the potential threat of anthrax and other biological agents.

"Our focus on protecting our people has broadened. We have to learn new methods, develop new partnerships, and strengthen existing ones."

> The Honorable Ronnie Musgrove Governor of Mississippi

Governor Musgrove stated that on October 16, 2001, he signed an executive order establishing an incident command system to enhance command and control of emergency incidents within the state. On February 5, 2003, he signed executive order 874 that established the Mississippi State Interoperability Executive Committee (SIEC). These two orders have set the state on a path to dramatically improve response, communications, and coordination of first responders in Mississippi.

The Governor highlighted the scope and function of the new SIEC, stating that the work of this committee was specific and focused—it would coordinate information between state agencies and

other levels of government and provide recommendations on both immediate and long-term improvements of public safety wireless communications. The goal would be to ensure that Mississippi's first responders were able to work and communicate with each other to achieve the end result of saving lives.

In closing, the Governor offered his thanks to all of the public safety agencies in Mississippi for their dedicated work and his appreciation to President Bush and Secretary Ridge for the release of \$7.5 million of new first responder funding to Mississippi.

"911 changed every community in every state in this Nation. No one has gone unaffected. We have a responsibility to the public, to those we serve, to ensure that we are prepared for any possibility or any threat."

> The Honorable Ronnie Musgrove Governor of Mississippi

Mississippi Executives Discuss the Importance of Communications Interoperability

To continue the momentum of the PSWN Program's assistance efforts to help the state develop short- and long-term initiatives to foster interoperability and plan for a statewide public safety communications system, perspectives from elected and appointed officials, examples of current public safety agency collaboration efforts, viewpoints from federal agencies, and best practices from other states were presented to conference attendees.

In the keynote address, presented by Mr. Robert Latham, Director, MEMA, and Mr. David Huggins, Commissioner, Mississippi DPS, both stressed the need for ongoing commitment and recognized the sacrifices of public safety for the citizens of the state. Furthermore, Mr. Latham indicated that all agencies, regardless of their governmental affiliation must be unified and collaborative in their approach to planning for furthering critical interoperability and communications systems. Mr. Latham stated that the ultimate goal was to create a seamless

wireless communications system that would enable critical information sharing between all agencies.

"Our ability to talk with each other and to streamline critical information sharing not only saves lives and property it will complement and support the crucial role of law enforcement, evidence collection, investigation, and certain prosecution."

> Mr. Robert Latham Executive Director MEMA

Mr. Huggins expressed his appreciation as a member and the selected first chairman of the newly created SIEC. He introduced other members of the SIEC who were present at the conference.

Mr. Huggins reiterated that the new SIEC was inclusive and consisted of a group of advisory members that would assist and broaden the perspective of the executive committee across all levels of government and functional disciplines. He encouraged all conference participants to reach out, contact, and become acquainted with SIEC members.

Mr. Huggins continued, drawing some parallels between the present interoperability challenges and the successful creation and deployment of the Mississippi Criminal Justice Information Center (MCJIC). He explained that MCJIC provided law enforcement database access and messaging throughout the state and connections to the National Crime Information Center through the National Law Enforcement Telecommunications System.

Mr. Huggins stressed the need to examine the current capabilities, assets, and resources that could be leveraged today to achieve better communication between local, state and federal agencies. He added that it was important to ensure that significant attention was paid to examination of the opportunities of Internet Protocol connectivity and the use of open architectures and non-proprietary systems.

"Today, we are fortunate, as you will hear from the Justice Department, Treasury, and other states—Florida, Missouri, South Dakota, Virginia, and Maryland—discussing various topics related to communications and interoperability."

> Mr. David Huggins Executive Director Mississippi DPS

The PSWN Program—Working with the States to Improve Communications Interoperability

The Nation's police officers, firefighters, emergency medical services (EMS), and other public safety personnel cannot always depend on wireless radio communications to provide the seamless exchange of information they require. This lack of interoperability between agencies can severely hinder public safety workers in providing a coordinated response to natural disasters, terrorist events, catastrophic accidents, or criminal incidents

The problem of interoperability has evolved over time. In the past, public safety radio systems operated in a common analog mode, generally in the same frequency band, making it relatively easy to communicate. However, as a result of the increasing need for spectrum, public safety radio frequencies became spread across many different bands.

As discussed by Mr. Robert E. Lee, Jr., PSWN Program Manager, Department of Justice, government leaders and the public safety community have begun efforts to improve interoperability. The Federal Government established the PSWN Program, to provide leadership on a variety of interoperability issues. As a partnership between the Department of Justice and the Department of the Treasury the

PSWN Program is—

- Dedicated to enhancing public safety communications interoperability at the local, state, federal, and tribal government levels
- Fully funded by the Federal Government and has no affiliation with commercial entities

- Actively participating in evolving homeland security initiatives
- Providing policy-oriented solutions and technical approaches through state interoperability assistance efforts, case studies, regional symposiums, pilot projects and conferences

Mr. Lee discussed the various PSWN Program activities across the Nation that are both ongoing and that have been completed. He remarked on the previous discussions of new federal funding and the importance of proper planning to ensure maximum benefits from the available funding.

Mr. Lee continued with a recap of the specific assistance provided by the Program to the State of Mississippi and the importance of the state's participation as the "linchpin" in the overall interoperability strategy. Mr. Lee concluded his comments by addressing the "next steps" for Mississippi that would maintain the momentum that has been generated though the state assistance effort. Table 1 highlights these activities.

Table 1 Next Steps for the State of Mississippi

- Obtain consensus for a plan of action among key stakeholders and state executives
- Continue to educate public safety professionals on the importance of interoperability issues and solutions
- Institute an effective, multi-agency coordination committee that is responsible for leading shared system and interoperability developments in the state
- Enhance and execute the elements of a clearly defined strategy for statewide system development
- Continue coordination and partnership efforts among local, state, and federal public safety agencies

Successful Statewide Systems and Regional Interoperability Initiatives

The conference included presentations from several other states and regions that have successfully begun implementing comprehensive statewide communications networks or regionally based interoperability

solutions. The State of Mississippi can benefit from these lessons learned as it begins to both long-term consider shortand future interoperability solutions and the development of statewide its own communications The conference system. presentations emphasized the importance of coordination and partnerships to the success of their activities.

Florida's Public-Private Partnership

The State of Florida has taken a unique approach in funding and acquiring a statewide public safety wireless communications system. Mr. Kourosh Bastani, Bureau Chief of the State Technology Office, provided an overview presentation of many of the challenges and complexities that faced the state through this ongoing project.

Mr. Bastani stated that the primary factors that compelled the state to seek a non-traditional funding and acquisition model were—

- Inadequate interoperability
- Unavailability of spectrum resources
- Inadequate coverage
- Interference
- Equipment obsolescence.

Florida has been involved in a process of implementing a statewide public communications system since 1984. According to Mr. Bastani, the Florida Legislature established a trust fund to support the procurement and continuing operations of the overall system. He explained that the trust funding was generated through an assessment upon vehicle registrations and was raising \$10 to \$12 million each year.

In 1998, the state realized that the initial efforts were requiring significantly more time to implement than planned and that the intended solution was costing significantly more than expected. Therefore, the state began to examine alternatives for the acquisition and implementation of the system.

In 2000, the public-private partnership effort began with the selection of a new contractor to implement the new system in a five-phased regional approach. According to Mr. Bastani, this public–private partnership leverages existing state communications assets, trust fund assets, and future trust fund proceeds over a 30-year contractual term. Much of the existing infrastructure is conveyed to the private partner at the end of the contract. In return, the state receives—

- A comprehensive statewide 800 megahertz (MHz) digital trunked system
- A statewide data communications backbone
- Guaranteed radio coverage (98 percent)
- Infrastructure and maintenance support for 20 years
- A total of 6,000 subscriber units
- A mobile disaster communications site
- Third-party revenue sharing for towers and subscribers equipment over 20- and 30-year terms, respectively

Mr. Bastani responded to several audience questions regarding the Florida Legislature's support of this partnership agreement and the funding mechanisms that had been previously passed. In conclusion, Mr. Bastani stated that through this innovative partnership the state would save more than \$859 million over the life of the system and the overall procurement cost would fall within the projected revenues available from the established trust fund.

Implementing a Statewide Very High Frequency (VHF) Trunking System—South Dakota Statewide System

The State of South Dakota recently began full operation of a new statewide VHF trunking system envisioned to support all public safety agencies throughout the state. Mr. Jeff Pierce, Project Manager, South Dakota Bureau of Information and Telecommunications (BIT), presented an overview of the new system and the process that was used to make it a reality.

Mr. Pierce provided some background regarding the State of South Dakota and its sparse population coverage. South Dakota has a current population of about 700,000. One of the primary catalysts for the development of the new system was the lack on adequate interoperability found among the legacy systems. According to Mr. Pierce, the efforts to develop a new statewide network in South Dakota were championed primarily by the previous Governor Janklow in response to two natural disasters that adversely affected the state

"In South Dakota, what were today's problems are fast becoming yesterday's problems through the implementation of this new statewide system"

> Mr. Jeff Pierce Project Manager State of South Dakota—BIT

Mr. Pierce discussed the various system dynamics that were considered in South Dakota prior to making system selection. South Dakota considered many factors prior to selecting a digital VHF trunking system. Several of the factors are listed in Table 2.

Mr. Pierce stated that the entire system was totally funded through grants and legislative appropriations and the budget supported maintenance cost and other ongoing expenses. Specifically, the state was successful in acquiring \$30 million in grant funding from a variety of different grant mechanisms. No user fees are assessed for use of the system.

Table 2 South Dakota System Selection Dynamics

Frequency

- Most public safety agencies in South Dakota operate in the 150 MHz band
- The majority of the neighboring states operate
 150 MHz systems
- Subscriber units are Project 25 compliant and can operate in narrowband channels

Interoperability

- Public safety agencies at all levels of government required interoperability
- Regionally, South Dakota was also concerned about providing adequate interoperability with neighboring states

Trunked Versus Non-Trunking

- Provides spectral efficiency through efficient use of channels
- Allows communications throughout the state initiated by any user anywhere
- Provides legacy subscriber unit access through system bridging and legacy systems access through statewide mutual-aid channel overlay
- Provides easy and affordable migration path for various public safety agencies

According to Mr. Pierce the system has been performing well and the 90/90 mobile coverage requirement has exceeded expectations. It is envisioned that when the system migrations are complete, the new system will support more than 8,000 subscriber units, which will represent 95 percent of all public safety agencies in the state. A grant from the U.S. Department of Health provided new mobile radios for every ambulance in the state.

Mr. Pierce stated that local and state participation was very important to the overall success of the project. Local and state agencies were asked to participate in the state network and, in exchange for participation, to relinquish any available VHF spectrum for use in the new system.

Mr. Pierce provided a list of critical items that were essential in making the new South Dakota system a reality. These items are listed in Table 3.

Table 3 South Dakota's Critical Items for Success

- Political Support—Governor and Congressional
- Local Support—Specifically Public Safety
- Dedicated Project Manager—Sole Responsibility
- Comprehensive Funding Plan—Grants and Appropriations
- Continuing Budget Support—Support Staff and Ongoing Planning
- Realistic Expectations for Time Frames and Completion Dates

Mr. Pierce responded to several questions from the audience regarding system participation and the talk group configuration. Additional follow-up questions were posed regarding the system's support of encryption and how key management is accomplished. Other participants were interested in the system's backup capabilities in case of a network component failure. Several questions were posed about the potential of public safety answering point consolidation in light of the efficiencies gained through the deployment of the new system.

Northern Virginia Trunked Mutual Aid Communications Group

Comparable to the other successful statewide and regional interoperability improvement efforts, Northern Virginia's initiative provides a model in the areas of coordination and partnerships. Mr. Jim Wadsworth, Manager of the Fairfax County, Virginia, Police Radio Center, presented information Services discussing Northern Virginia's Trunked Mutual Aid Communications Group. Fairfax County, Virginia, is located within the Washington DC, metropolitan area. The county operates a Motorola ASTRO digital simulcast trunked radio system. The system contains eight sites, 20 channels, with more than 3,000 subscriber units, and supports all Fairfax County's public safety agencies and the police departments of Fairfax City, Herndon, and Vienna, Virginia.

Mr. Wadsworth discussed the Air Florida 109 crash that was the defining event for the creation of what would become the Northern Virginia Trunked Mutual Aid Group.

Mr. Wadsworth stated that a regional mutual-aid communications planning process was a longterm commitment. The ongoing process results from a need to continually address change management issues, user training, and problem resolution. According to Mr. Wadsworth, the area public safety agencies were committed to maintaining and enhancing the efficient method of conducting communications for mutual-aid events. Through this commitment. participating area agencies have established a regional committee with representatives from each public safety discipline—law enforcement, fire, EMS, and radio system management. This committee was responsible for the development of the regional communications plan. The committee meets on a periodic basis to address issues as they arise.

Mr. Wadsworth discussed and listed the general objectives of the process that was used by the committee to achieve an interoperable network—

- Develop plans, standard operating procedures, policies, guidelines, and other documentation
- Develop radio zone/channel layouts
- Secure approval of home agencies
- Monitor success of program in home agency
- Identify and resolve issues.

He continued by emphasizing that mutual-aid communications planning required an adequate balance between the technology solutions and policy solutions. He stated it was imperative to keep the solutions simple.

Mr. Wadsworth provided some additional discussion regarding the response to the terrorist attack at the Pentagon as an example of how the Northern Virginia Mutual Aid Plan actually performed. During the September 11 attack at the Pentagon, all local responders involved in the initial fire suppression, EMS, and rescue effort had direct communications capability with the Arlington County Fire Department using the Arlington County trunked radio system and its assigned operational talk groups used for the

incident. The area police departments made use of direct interoperability to coordinate traffic control with Arlington County, Fairfax County, and the City of Alexandria. A complement of loaner radios was made available to agencies not operating with trunk capability.

Mr. Wadsworth credits comprehensive participation and the ongoing planning activities of the Northern Virginia Trunked Mutual Aid Group with the successful fireground communications during the initial response to the Pentagon.

The region is continuing to improve and expand its communications interoperability as several of the surrounding public safety agencies in County, Virginia. Montgomery County, Maryland, and Prince William County, Virginia, are in the final stages of completing new 800 MHz trunked radio systems. addition, Fairfax County is adding three new sites to its system and one site to its mobile data communications system. Fairfax is also replacing its public service system with a new trunked network, which will also serve as a primary backup system to the Fairfax County public safety system.

"During the blizzard of 2003, the radio system's interoperability was instrumental in allowing us to clear roads and effectively respond to public safety events."

Mr. Jim Wadsworth Police Radio Manager Fairfax County, Virginia

Maryland Incident Management Interoperable Communications System (MIMICS)

Maryland operates a 32-channel low-band communications system and is constructing a network of Raytheon JPS ACU-1000 switches to provide interoperable communications between fire, police, and EMS personnel. Mr. Michael E. Bennett, Director of Communications for the Maryland State Police provided an overview presentation of the status of the MIMICS initiative

"In public safety, voice communications is the vital link to all of us"

Mr. Michael Bennett Director of Communications Maryland State Police

and other communications challenges in the State of Maryland.

According to Mr. Bennett, Maryland is composed of 24 political jurisdictions made up of 23 counties and the City of Baltimore. Of these 24 entities, 17 are using or moving to an 800 MHz trunked communications system. The Maryland State Police system is composed of —

- A 32-channel low band (39 MHz) system
- Two statewide high band VHF channels
- 23 statewide dispatch centers
- 63 transmitter/receiver sites
- 1,900 low band mobile radios with vehicular repeaters.

Mr. Bennett indicated that due to the many changes in the communications environment of public safety agencies in and around Maryland and the perception that Maryland is a "targetrich" environment for potential terrorist activity, it became necessary for the state to consider enhancing interoperability.

To meet this requirement, the Governor's Office tasked the Maryland State Police to create a new system that would provide critical interoperability between—

- Local law enforcement
- Federal agencies
- State Police
- Fire departments
- EMS
- Department of Natural Resources
- State Highway Department.

According to Mr. Bennett, MIMICS comprises 20 fixed sites supporting ACU-1000 audio interconnect devices that are networked together through the state's microwave backbone system. The system is designed to operate only during a mutual-aid or catastrophic incident and not for day-to-day interoperability use. The system also supports mobile, rapidly deployable equipment.

Mr. Bennett expressed his appreciation to the PSWN Program for the assistance it has provided for the development of five of the fixed sites within the system.

Another important aspect of MIMICS is the use of memoranda of understanding (MOU) and standard operating procedures that have been developed for use between participating agencies. Mr. Bennett stated that the standard MOU was purposely very basic and used attachments or addenda for specific user information. This tactic eliminates the need for changes to the entire document.

Mr. Bennett used the shooting incidents at Columbine High School in Colorado to further illustrate the need for adequate interoperability. He stated that while MIMICS did not provide for day-to-day interoperability it did meet the critical need for mutual aid and critical incident communications

Mr. Bennett answered a variety of questions from the participants regarding the site configurations, costs, funding, comparisons with console patching, and the parameters of federal agency participation due to security concerns. He estimated that when completed, the system should support more than 25 ACU-1000s in a fully networked environment.

Jackson, MS FBI Assistant Special Agent in Charge Provides Key Points on the Importance of Secure Communications

Mr. Lee introduced Mr. William V. Jenkins, Assistant Special Agent in Charge, FBI—Jackson Office to continue the lunch presentation.

Mr. Jenkins discussed the importance of secure wireless interoperable communications between all agencies. He provided several humorous examples of secure communications, drawing upon personal discussions with teenager children and his inability to decipher what he was being told regarding the topics of popular music and personal computer operation. On a more serious

note, he discussed secure communications that occurred during World War II incorporating the talents of Navajo code talkers.

Mr. Jenkins discussed his personal experience using interoperable communications to coordinate and facilitate the investigation of the crash of American Eagle flight 4184 near Roselawn, Indiana. He stated that an essential part of the on-scene effort was coordinated communications and partnerships with other responding agencies at the scene. Eventually, some 53 different agencies with various missions responded to the crash scene.

Mr. Jenkins credits effective coordination and partnerships with other Indiana public safety agencies for the successful culmination of the crash investigation and the expedient identification of the 64 passengers and crew aboard the flight.

Grants and Funding: Where to Apply for Assistance and Who Has the Money

Bruce Clemonds, Corporal, Missouri State Police provided a presentation regarding the funding sources that might be available to fund a public safety communications system. Mr. Clemonds is the Grants Projects Specialist.

Mr. Clemonds encouraged the conference attendees to look beyond traditional sources of public safety funding (e.g., Federal Government) to others opportunities such as private donors, corporations, foundations, or trusts.

According to Corporal Clemonds, grant funding might also be available from other unlikely sources such as the U.S. Department of Education and the U.S. Department of Transportation as a component of supporting these agencies' missions. He added that state and local applicants might be able to pool grants from multiple sources to address joint communications needs. He also stated that agencies should not overlook grant opportunities that might be available though state agencies or from private resources within the state.

"If you are not looking at the private donors, corporations, foundations, or trusts, then you are looking at only 30 percent of the available grant funding."

Corporal Bruce Clemonds Grants Projects Specialist Missouri State Police

Corporal Clemonds pointed out that many of the granting agencies had vast online resources where valuable research and application tools were available. The grant process is moving away from traditional paper-based applications and selection processes. He also pointed out that several of the grants were only available through online application. Table 4 lists a number of online grant resources.

According to Corporal Clemonds, the various grant programs have different application processes as well as varying requirements that that must be met to qualify for the desired grant. He stressed that both government and private grant organization had these requirements. Also, care must be taken when applying for grants to ensure that all of the parameters are understood, especially when matching funds are required for the seeking agency.

Corporal Clemonds provided many examples of Web pages dedicated to grant funding. He explained many of the idiosyncrasies of many of these grant opportunities. Corporal Clemonds remind the attendees that many of the federal programs were presently updating their grant funding information for the 2003 fiscal year, and the application process would begin soon for some grants. Corporal Clemonds stated that it was important for agencies to consider dedicating personnel to researching and applying for grant funding if an agency wanted to be markedly successful. He also introduced two textbooks and other materials that could be beneficial for grant writers or agencies that were researching opportunities. In closing, Corporal Clemonds stressed the importance persistence, significant research, coordination with other agencies, and proper selection of the best grant opportunity to match an agency's potential project.

State Interoperability Executive Committees (SIEC) and Their Importance to Public Safety

SIECs are considered one of the most an important factors in enhancing interoperability within a state. An SIEC serves as a centralized forum to address interoperability issue and to encourage development and modification of public safety communications assets within the state. Mr. Robert E. Lee, PSWN Program Manager, Department of Justice and Mr. Tom McAllister, Operations Branch Chief, MEMA provided an overview of the SIEC concept and creation process, examples of SIECs established around the country and the activities that culminated in the formation of the Mississippi SIEC.

Mr. Lee provided some historical perspective of the development of the SIEC process and indicated that it originally began as a coordination committee for 700 MHz spectrum. The process has evolved in to what is now recognized in several states as a state executive-level group that coordinates interoperability efforts and acts as a central point of contact.

Mr. Lee indicated the following as common objectives of SIECs—

- Promoting systems development that maximizes interoperability, infrastructure sharing, and economies of scale
- Initiating consolidated planning, budgeting, systems procurement, training, and maintenance activities
- Providing a forum for developing coordinated approaches, building relationships, and sharing information in order to effectively address key public safety interoperability issues throughout a state or region.

Mr. McAllister opened his comments by informing the conference attendees that the Mississippi SIEC existed and was created by an executive order 874 from Governor Musgrove on February 5, 2003. Figure 1 is a copy of the first page of the order.

STATE OF MISSISSIPPI

Office of the Governor



EXECUTIVE ORDER NO. 874

State Interoperability Executive Committee

WHEREAS, the State of Mississippi is committed to ensuring the public safety of the citizens, visitors, and natural resources of Mississippi; and,

WHEREAS, the Homeland Security Interoperable Communications Force and the State Radio Committee have already demonstrated the value of working across agency and jurisdictional lines to foster cooperation and coordination of voice and data information throughout the state; and,

WHEREAS, developing interoperable public safety communications systems is vital to the overall mission of public safety agencies and the safety of public safety personnel and the people they serve to protect; and,

WHEREAS, due to new technology and improved standards, the ability of public safety communications systems to be connected when and where necessary has been vastly improved in recent years; and

WHEREAS, there is a need to recognize, encourage, and continue a joint approach to wireless communications interoperability and system development among public safety entities within departments of state government;

NOW, THEREFORE, I, Ronnie Musgrove, Governor of the State of Mississippi, by the authority vested in me by the Constitution and laws of the State of Mississippi, do hereby create and establish, the Mississippi State Interoperability Executive Committee.

I. PURPOSE

The Mississippi State Interoperability Executive Committee, hereafter referred to as SIEC, is hereby charged with fostering continued coordination across state agencies and between the state and other governmental agencies within Mississippi. The SIEC will also provide recommendations for both the immediate and longer-term improvement of public safety wireless communications interoperability and shared systems development.

Figure 1 Executive Order 874 Creating the Mississippi SIEC

Mr. McAllister continued his discussion by highlighting specific items of the order such as the purpose, membership structure, and functions. He reiterated that the SIEC was not a plan or function of only the state. The SIEC is a tiered plan that strives to be collective and inclusive of all levels of government.

"Interoperability at the state level without interoperability at the local level is no interoperability at all."

Mr. Tom McAllister Operations Branch Chief MEMA Mr. McAllister continued his discussion by outlining the advisory committee responsibilities and informing the audience of the outcomes of the first meeting of the SIEC on February 28, 2003. He remarked that the creation of the SIEC was a step forward in recognizing and addressing critical interoperability needs that existed throughout the state.

Furthermore, it is the charge of the committee to review various short- and long-term opportunities that may serve as solutions to the interoperability shortfalls that exist in Mississippi.

Mr. McAllister challenged the audience to become involved in the SIEC process by participating in the regular meetings and by initiating dialog with the SIEC executive committee and advisory board members. He encouraged attendees to compel their individual agency and department heads to become involved and participatory.

Mr. McAllister responded to several inquiries and comments from the audience and was joined in responses by Mr. Delaine Stacy, Director of Special Projects, MHP.

Mr. McAllister closed by advising the conference attendees of the meeting notification process and where the information would be found once the next meetings were scheduled.

Mississippi Communications Interoperability Strategy Panel

The conference provided an opportunity for elected officials and public safety officials from local, state, and federal agencies to engage in a panel discussion of the five key issue areas surrounding interoperability—coordination and partnerships, funding, spectrum, standards and technology, and security. This exchange of ideas and viewpoints reinforced the priority of interoperable communications in the State of Mississippi.

Mr. Delaine Stacy, Director of Special Projects, MHP, moderated a panel discussion regarding communications interoperability. The panel members included Mr. Tom McAllister, Operation Branch Chief, MEMA, Mr. Robert

"Gil" Bailey, Director, Harrison County Communications, Mr. Donald Loper, Director of Communications, MHP, the Honorable Richard White, Senator, Mississippi State Senate, Mr. Todd Williams, Technical Manager, FBI—Jackson Office.

The moderator presented the panel members various questions, and all panel members were encouraged to add their viewpoint and responses. The dialog was followed by an interactive session with conference attendees.

Mr. McAllister discussed the importance of continuing to recognize that a critical situation existed within the state regarding a lack of sufficient interoperability. It was needed not just for the crisis event, but the common day-to-day communications capabilities were also inadequate. As Mr. McAllister continued, he indicated that for the public safety community to be successful in these efforts the "turf battles" must be put aside and everyone must make a commitment to sharing resources and partnering with each other.

All levels of government must participate and must share information so that the SIEC can formulate and generate informed and proper plans to increase awareness, generate support, obtain funding and deployed workable solutions.

Mr. Stacy stated that it was important to remember that every incident, regardless of size or complexity began as a local incident.

Mr. Loper discussed the importance of proper use and discipline with regard to the existing statewide mutual-aid channel. He indicated that the channels were available for mutual-aid interoperability communications, but that some agencies had resorted to using these channels as if they were private, exclusive dispatch channels. Mr. Loper continued that he believed that primarily a lack of training and information about the structure, use, and management of statewide channels caused this situation. Mr. Stacy concurred with Mr. Loper's comments and proposed that this might be an issue for a SIEC subcommittee to address going forward.

Mr. Stacy asked Mr. Bailey his views about garnering increased funding to meet the interoperability and communications challenges that faced both local and state agencies. Mr. that one of Bailey stated the accomplishments in Harrison County was to meet and obtain information from all of the affected agencies within the county. It was imperative that they all had a chance to participate and express their viewpoints. Going forward this information was used to formulate both short- and long-term plans for agency communications within the county. Mr. Bailey stressed that all agencies were encouraged to make use of existing legislation (HB 469/SB 1004) that would provide a degree of funding from traffic citation assessments.

Mr. Bailey reiterated that it was very important to have commitment and participation from the local agencies as the county moved forward to create the new communications system. The result was that the county was able to implement a \$20 million system, funded solely with public safety 911 surcharges.

Senator White commented that Harrison County had produced a capable and successful model that should be useable elsewhere in the state to fund communications systems improvements. Senator White added that the legislature is very supportive of innovative ideas that could elicit the necessary change. He stated further that it was of the utmost importance that the public safety community as a whole communicates and keeps its local and state legislators informed of the needs, desires, and progress of various communications projects.

"Communications is the word. Work together as a concerted group."

Honorable Richard White State Senator Mississippi State Senate

Mr. Williams discussed some of the challenges regarding existing spectrum allocations. He indicated that agencies should exploit existing capabilities and look for avenues to shares spectrum resources. Furthermore, in the short-term opportunities for existing system

interconnections must be analyzed and accomplished to provide better interoperable communications between all levels of public safety services.

Mr. Loper discussed the potential of adding additional interoperability frequencies on the four major bands a statewide basis. He stated that the development of the SIEC and the continuing efforts to involve agencies and departments at all levels would help to identify additional needs and opportunities for consideration.

Several questions from the audience members were addressed regarding existing mutual-aid frequencies and the potential of adding new frequencies. Senator White and Mr. Williams both provided comments and additional discussions. Senator White compared the problems that Mississippi agencies would have faced if the shuttle disaster had occurred in Mississippi instead of Texas.

Mr. McAllister addressed audience comments and questions regarding the changes to National Alert Warning System (NAWAS) network that had recently occurred and its appropriateness to support state and local communications. Mr. McAllister stated that he envisioned major changes with NAWAS and that the price for equipment and monthly fees would likely drop, making the system more accessible for many agencies.

Mr. Stacy discussed the potential for the state to create a position for a statewide frequency coordinator. This position is envisioned to handle all coordination issues but would also be responsible for ensure proper operation and policy compliance with regard to mutual-aid frequencies. Several audience members made comments and added support for this concept. Others indicate that this should be an item for consideration by the SIEC in its planning for short- and long-term objectives. Senator White and Mr. McAllister provided additional discussions and support for this idea. Mr. Bailey recommended that the SIEC consider the formulation of a technical sub-committee that could assist all Mississippi agencies with technical questions and concerns. Mr.

McAllister supported this position as he recounted many times that his agency had been requested to provide technical insight to other local and state agencies.

Mr. Stacy summarized the discussions and indicated that the SIEC would need to provide a clear and informed plan of action to the legislature describing where the state needed to go and the resources that might be required.

Strategies to Improve Mississippi's Public Safety Communications

The Mississippi Public Safety Communications Interoperability Conference highlighted the proactive initiatives that are under way and other actions and approaches that may be used to improve both overall communications and critical interoperability among public safety and governmental agencies within the state. formation of the SIEC, the demonstration of leadership and commitment at the highest levels of state government and the impetus provided by the combined efforts of state agencies and the PSWN Program can be combined to form an actionable strategy. This strategy will be the catalyst to move Mississippi forward in solving critical interoperability issues that exist today while planning for the statewide communications systems of tomorrow. These critical systems are used by all levels of government to reduce the risk to life and property in response to natural or man-made disaster.

• Coordination and Partnership Strategies

- ☐ Continue to educate all elected and appointed government and public safety officials on the critical importance of interoperability
- Assess opportunities to leverage existing communications assets within all agencies at all levels of government to meet short-term interoperability needs and future system requirements
- ☐ Participate and support the SIEC's activities to coordinate and plan interoperability and statewide communication system enhancements

	Challenge the public safety community to continue to break-down real and perceived barriers that inhibit working together	•	Standards Strategies Develop a set of suggested common requirements that embrace open standards and interoperability capabilities for all agencies to use when procuring new systems or upgrades Continually challenge the vendor community to provide seamless interoperable open standards based systems that will provide backward compatibility to existing legacy networks
	Actively participate in long-range planning efforts to develop a seamless statewide interoperable communications system	_	
	Ensure all new system development efforts take into account existing systems and networks and that new systems incorporate adequate functionality to support interoperability		
•	Funding Strategies		Ensure that new systems that are developed
	Identify additional funding opportunities and revenue streams that may be used to construct and operate public safety communications systems and provide critical interoperability enhancements		and deployed support scalability and capabilities to incorporate new innovative technologies
	In order to secure required funding collectively develop innovative solutions to existing communications problems and present various options to legislative officials		
	Fully utilize and exploit existing funding legislation to plan, procure, construct, and maintain public safety communications systems		
	Leverage existing communications systems, land assets, structures, and facilities of all government entities to minimize new system development and implementation costs		
•	Spectrum Strategies		
	Evaluate opportunities to create additional statewide interoperability frequencies for all public safety agencies		
	Examine frequency sharing possibilities between agencies that will permit almost immediate low cost interoperability		
	Pursue the creation of state frequency coordinator who will assist Mississippi agencies with frequencies and communications related matters		
	Develop better training methods and policies to ensure proper operations and discipline by users while on mutual-aid channels		

Next Steps—Mississippi Moving Forward...

"Coordination and Partnerships" and "Maintaining the Momentum" the resounding themes of the Mississippi Public Communications Interoperability Conference. Conference attendees understood by day's end that for the first time, there was leadership and support at the state level. Furthermore, in order to keep the momentum of the efforts that had been achieved thus far, the word must continue to be spread about why public safety interoperability was important not only to those who serve the public, but all citizens of Mississippi.

This conference provided opportunities for public safety agencies across all levels of government in the State of Mississippi to communicate their own needs, understand those of other participants, and begin to build relationships that make coordination easier.

It is critical that conference attendees take advantage of the collaboration opportunities presented during the conference. Additionally, the attendees are encouraged to reach out, become involved and informed, and support the SIEC process. These collective and collaborative efforts will facilitate increased support for the short-term efforts provide critical to interoperability efforts and the longer-term goal seamless statewide wireless communications system.

The public safety community should maintain and develop its "champions" in the State Legislature and the Governor's Office to eventually obtain the necessary funding that will truly provide new public safety communications beginnings in the State of Mississippi.

The Mississippi SIEC has made great strides in a very short period of time in ensuring public safety communications interoperability is understood and accepted as a standard practice.

Much more must be done in the near future to move the state and the public safety entities of Mississippi forward in their efforts to achieve truly seamless interoperable communications. For more information about the Mississippi SIEC, please contact either Mr. Delaine Stacy Director, Special Projects, Mississippi Highway Patrol at (601) 987-1447, e-mail dstacy@mdps.state.ms.us or Mr. Tom McAllister, Branch Operation Chief, Mississippi Emergency Management Agency at (601) 960-9021, e-mail tmcallister@memaorg.com.

Conference attendees can also obtain additional information about interoperability and nationwide efforts to implement solutions that address public safety radio communications interoperability through the PSWN Program at www.pswn.gov or the Public Safety Wireless Interoperability Strategy (WINS) at www.publicsafetywins.gov or by calling 1-800-565-PSWN.

About The PSWN Program

"No man, woman, or child should lose his or her life because public safety officials cannot talk to one another."

The PSWN Program was formed to promote effective public safety communications and to foster interoperability among local, state, federal and tribal communications systems. The original program was initiated in 1996 and co-managed by the Department of Justice and the Department of the Treasury. The program is now being co managed by Justice and the Department of Homeland Security. With guidance from the Federal Law Enforcement Wireless Users Group and an executive committee that includes prominent local and state public safety officials, the program is addressing issues facing local, state, federal, and tribal public safety agencies as they work to improve communications interoperability.

Since the program's inception, we have promoted partnerships among public safety agencies, conducted case studies in several regions of the Nation, initiated pilot projects to test and refine interoperability solutions, addressed spectrum policy and funding issues important to public safety, and investigated issues associated with system security and standards and technology development.

The PSWN Program has actively supported local, state, and federal entities in improving public safety wireless interoperability. A few examples include—

- Launched an interactive Web site for Public Safety WINS: Wireless Interoperability National Strategy to highlight interoperability progress and solutions
- Developed pilot projects in locations nationwide to demonstrate and test interoperability solutions in actual operational settings
- Convened the PSWN Executive Committee, which comprises prominent local and state public safety officials, to provide strategic guidance and promote the need for improved communications interoperability
- Contributed to the Federal Communications Commission decision to allocate 50 MHz of spectrum in the 4.9 gigahertz band for public safety broadband applications (e.g., high-speed video and data)
- Urged the Federal Emergency Management Agency to provide First Responder Grant monies to buy local public safety communications equipment and enhance interoperability